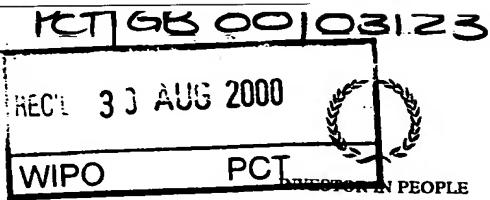




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I also certify that by virtue of an assignment registered under the Patents Act 1977, the application is now proceeding in the name as substituted.

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GB9919172.8

By virtue of a direction given under Section 30 of the Patents Act 1977, the application is proceeding in the name of

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3. Full name, address and postcode of the or of
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HIGH WYCOMBE,
BUCKINGHAMSHIRE HP11 1REPatents ADP number (*if you know it*)

7721400001

If the applicant is a corporate body, give the
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4. Title of the invention

GRAHAM F COLES

GRAHAM COLES & CO
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Number of earlier application

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Description 4

Claim(s)

Abstract

Drawing(s) 5

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I/We request the grant of a patent on the basis of this application.

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12. Name and daytime telephone number of person to contact in the United Kingdom

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Desks

This invention relates to desks.

5 The growing trend for homeworking increases the need for desks to be used in the home, placing demands on domestic space. The spare bedroom is often used as an office, but is frequently not big enough to provide space sufficient for both a bed and a desk or for both to be used
10 comfortably.

It is one object of the present to provide a form of desk that may be used to mitigate the above problem.

15 According to one aspect of the present invention there is provided a desk wherein the base-structure for supporting the top of the desk includes a recess for accommodating and retaining a mattress or futon within the desk, the recess extending within the desk from a first part covered by the desk-top into a second part located behind an upright wall of the base-structure, and wherein the desk-top is moveable relative to the base-structure to extend substantially horizontally therefrom, the desk-top when so moved uncovering the first part of the recess and enabling release of the mattress or futon from within the second part for deployment supported substantially horizontally partly on the base-structure and partly on the desk-top.
20
25

30 The desk of the invention accordingly has two configurations in a first of which it has the form of, and is useable conventionally as, a desk, and in the second of which, following movement of the desk-top as aforesaid, is useable as a bed. Accordingly, the desk of
35 the invention combines in the one item of furniture, the two functions of desk and bed, and can be readily converted from one to the other. The desk therefore

offers the possibility of saving domestic space in the provision of desk- and bed- functions selectively.

5 A form of desk in accordance with the invention will now be described, by way of example, with reference to the accompanying drawings, in which:

10 Figure 1 is a perspective view from the front, of the desk of the invention when configured for use as a desk;

Figure 2 is a sectional view of the desk of Figure 1 when configured for use as a desk and containing a futon, the section being taken on the lines II-II of Figure 1;

15 Figures 3 and 4 illustrate in side elevation successive stages of conversion of the desk of Figure 1 to form a bed;

20 Figures 5 and 6 are a side elevation and perspective view respectively, of the desk of Figure 1 when converted to have the form of a bed.

Referring to Figures 1 and 2, the substantially-horizontal top 1 of the desk is supported on a carcass 2 that includes two drawer-units 3. The units 3 are spaced laterally from one another to define a well 4 to accommodate the desk-user's legs when he/she is sitting up to the desk.

30 As shown by Figure 2, the height of the well 4 is defined by horizontal slatting 5 of the carcass 2. The slatting 5, which extends across the full width of the desk over the units 3, is spaced below the desk-top 1 to leave a recess-part 6 in the carcass 2, covered by the top 1.

35 The horizontal recess-part 6 is contiguous with, so as to extend into, a vertical recess-part 7 that throughout the full width of the desk is defined in the carcass 2

between an upright back wall 8 of the desk and an upright inner wall 9. The recess-parts 6 and 7 combine to provide accommodation and support for a folded futon 10 concealed within the desk.

5

The futon 10 is accommodated in a folded condition within the desk. Approximately two thirds of the futon-length is received folded in half as portions 10A and 10B standing upright within the recess-part 7, whereas the 10 remaining portion 10C extends folded down substantially horizontally from the portion 10B into the recess-part 6. The futon-portion 10C lies under the desk-top 1 on the slatting 11 of a partially-slatted frame 12 that rests within the recess-part 6 on the slatting 5. The frame 15 12, which is pivoted on either side to the desk-top 1 towards the back, is itself pivoted to the carcass 2 at the front of the desk.

20

When the desk has the normal configuration shown in Figures 1 and 2, it is useable as, and provides the conventional facilities of, a desk. However, the configuration of the desk can be changed to convert it into a bed, simply by releasing a lock (not shown) that secures the top 1 covering the carcass 2, and lifting the 25 top 1 up from the carcass 2 about the pivoting with the frame 12. This allows the futon-portion 10C to rise from the recess-part 6 and be freed from within the frame 12 as the top 1 is pulled inclined upwards and forwards in the direction from back to front of the desk.

30

Once the futon-portion 10C is free, the desk-top 1 is pulled horizontally in the same direction from back to front of the desk, causing it to rise progressively upwardly and then downwardly relative to the carcass 2 as the frame 12 pivots on the carcass 2, in the manner 35 illustrated in Figures 3 and 4. Continuation of the movement brings the top 1 extended on the frame 12 from

the front of the desk, to project substantially horizontally level with the slatting 5 and 11, as illustrated in Figures 5 and 6.

5 In the normal configuration of the desk, the frame 12 lies upside-down on top of the slatting 5, but pivots up from there about the front of the desk as the top 1 is pulled forward. When, with the further pulling out of the top 1, the frame 12 pivots down into alignment with
10 the slatting 5, the frame 12 can turn no further and locks in the horizontal attitude. The top 1 is then brought into alignment with the frame 12 to be locked projecting horizontally. In this condition, two legs 13 which are normally stowed folded up under the front edge
15 of the top 1, are pivoted down to give front-end support to the top 1. The desk is now in the bed-configuration.

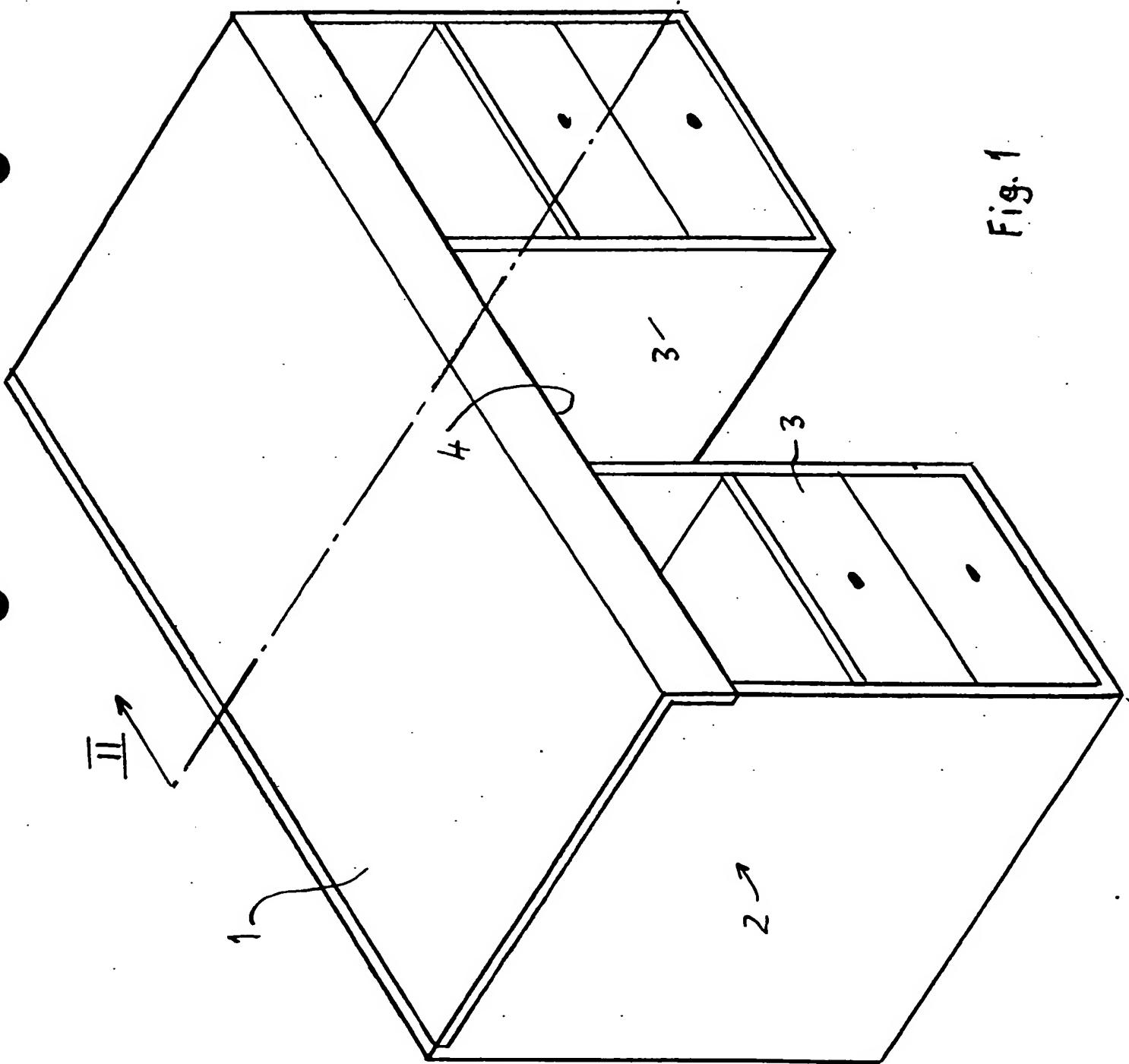
The futon 10 (not shown in Figures 3 to 6) can now be pulled by the portion 10C to withdraw the portions 10A and 10B from the recess-part 7 and deploy it lengthwise on the substantially-horizontal surface constituted by the aligned slatting 5 and 11 and desk-top 1. Once the futon 10 is clear of the recess-part 7, a hinged panel 14 of the back wall 8 is pivoted down to cover the recess-part 7 and allow the full available bed-length on the carcass 2 to be used for support of the futon 10.
20
25

When the desk is in the bed-configuration it can be readily returned to the desk-configuration by folding up
30 the legs 13, re-stowing the futon 10 within the part-recesses 6 and 7, and pushing the top 1 upwardly after it has been unlocked from alignment with the frame 12. Once the top 1 has been folded back over the carcass 2 it is
35 locked in place to restore the desk to its normal, compact configuration.

$\frac{1}{5}$

$\frac{II}{III}$

Fig. 1



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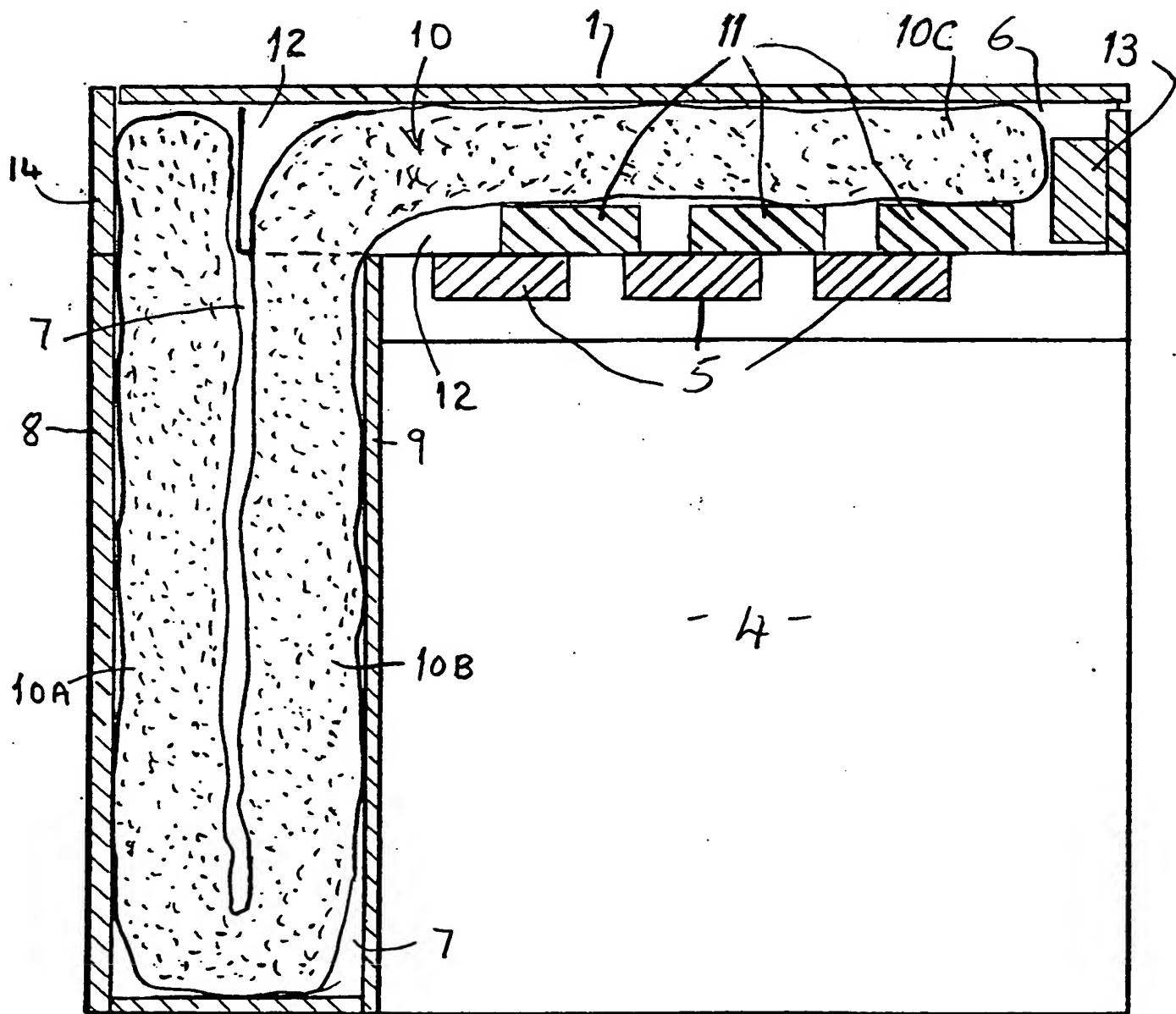


Fig. 2

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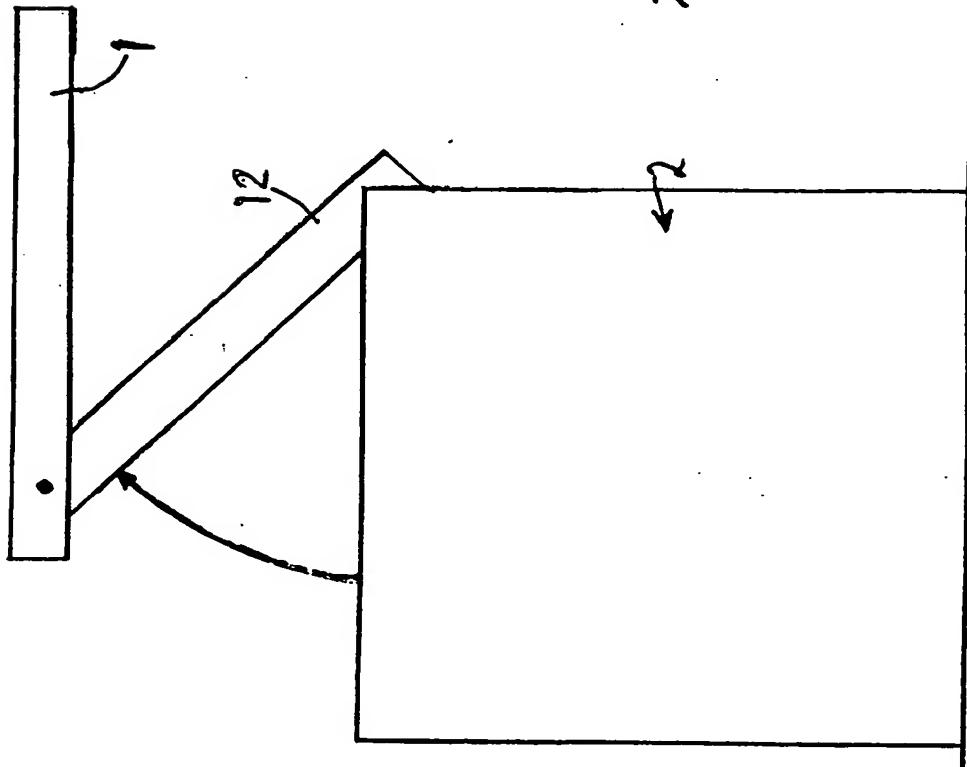
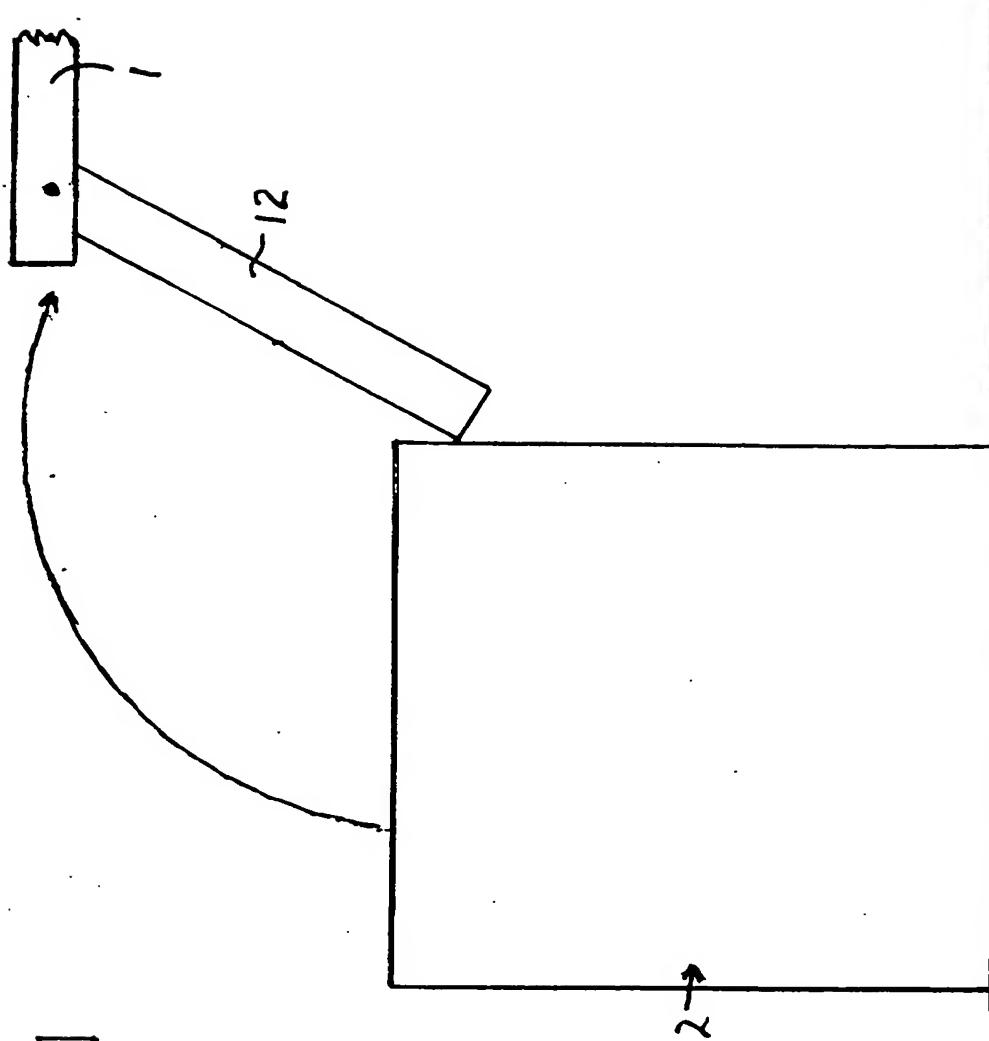


Fig. 3

Fig. 4

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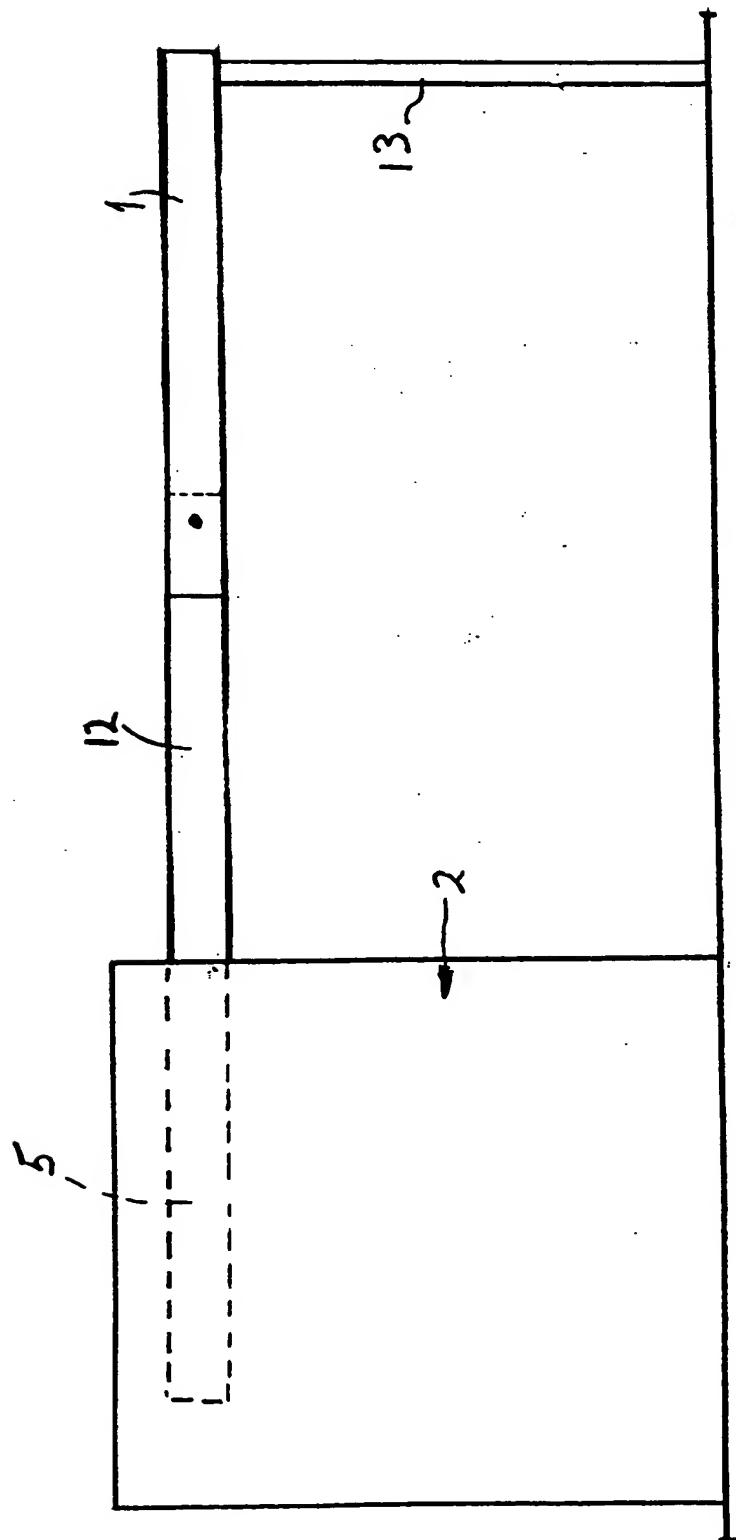


Fig. 5

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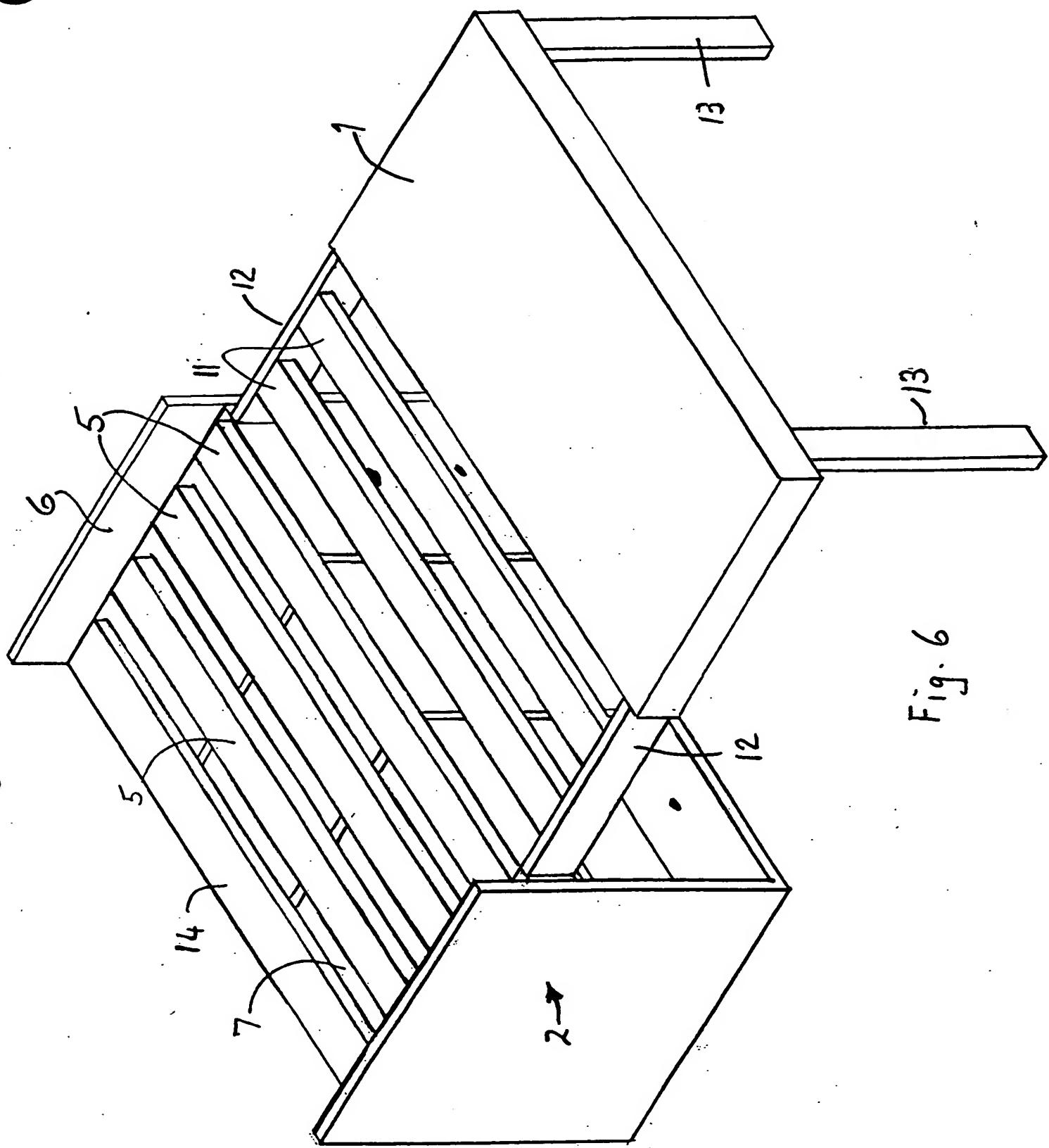


Fig. 6

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